Lexical Complexity of Decision-Making Writing Tasks: Form-focused Guided Strategic Planning

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Abstract

The present study is an attempt to investigate the effect of form-focused guided strategic planning on lexical complexity of learners' performance in writing tasks. The twenty intermediate level participants of the study performed an unplanned and then a planned decision-making task. In the planned task condition, the participants were provided with form-focused guided strategic planning which contained detailed instructions about how to plan, by being instructed to focus on form. The guidance included an explanation of the necessary structural and lexical patterns employed to express the learners' views while developing a comparison-and-contrast paragraph in each task. The results of the statistical analysis indicated that the participants produced a written product with a greater lexical complexity in their performance of the task in the form-focused strategic planning condition. The findings emphasize the importance of guided strategic planning as a task condition in syllabus design for task-based language teaching and the necessity of incorporating this task feature for accomplishing lexical complexity in decision-making writing tasks.

***Keywords*:** Decision-making task, lexical complexity, form-focused guided strategic planning

Introduction

The recent years have seen a growing interest in task-based language teaching (Ellis, 2003; Willis & Willis, 2007). Identifying possible sources of task complexity and the way such factors contribute to changes in task response characteristics is a prerequisite for making principal decisions about grading and sequencing of tasks in TBLT. The issue of task types and variation in learners' performance is of main concern of language teachers and syllabus designers (for a review of research, see Ellis, 2003; Robinson, 2001b; and Skehan, 1998). Variety of design factors (e.g., planning, reasoning demand, number of elements, feedback, contextual support, and topic familiarity) and how they influence the language produced by learners regarding accuracy, complexity, and fluency have been the main focus of studies of many researchers (e.g., Ellis, 2009; Foster & Skehan, 1999; Housen & Vedder, 2009; Wigglesworth & Storch, 2009). On the other hand, planning is an important task feature. Research to date indicates that pre-task planning has a positive effect on language production especially as far as speaking tasks are concerned (Ellis, 2005). However, more research is needed before we can decide how planning affects learners' performance in performing writing tasks of different types. Furthermore, the previous studies mostly investigate online vs. strategic planning. In the present work, a particular type of strategic planning, namely form-focused guided strategic planning was examined. Moreover, decision-making task, a particular type of writing task which is commonly used in EFL writing courses, was investigated.

Literature Review

Planning in Task-based Language Teaching

SLA researchers have made predictions about how task conditions, such as strategic planning can influence learners' attention in different ways and how this impacts on task performance in terms of three main task response characteristics, i.e., accuracy, complexity, and fluency. Two of the most influential claims come from Skehan's (1998) Limited Capacity Hypothesis and Robinson's (2003) Cognition Hypothesis.

Skehan (1998) argues that learners have limited attentional resources which have adverse effects on fluency, accuracy and complexity when task demands are high, for example when there is no planning time. "The assumption is that more demanding tasks consume more attentional resources simply for task transaction, with the result that less attention is available for focus on form" (p. 97). Skehan (1998) argues that complex tasks will result in learners' attending more towards meaning and the communicative aim of the task and less attention will be focused on language. Consequently, attention capacity limits forces the learner to prioritize one aspect of speech over another when performing complex tasks. As a result, tasks can result in gains in accuracy or complexity but not both. Taking Skehan's (1998) assumption that learners have limited attentional resources, Samuda and Bygate (2008) argue that it is possible to 'free-up' attentional resources by providing strategic planning "which reduces the processing load of subsequent on-line performance: speakers may have mentally organized the content; and/or worked on the formulation of aspects of the communication" (p. 39). In other words, strategic planning provides time for learners to attend to conceptualization (message content) and/or formulation (grammar encoding) which is then stored in memory and later produced during task performance as more fluent, complex and/or accurate L2 speech.

Robinson (2011) on the other hand, argues against limited attentional capacity processing and a trade-off between accuracy and complexity. He believes that learners can access multiple resources of attention and that both aspects of language can be improved by having learners perform more cognitively demanding tasks. For example, increasing the amount of reasoning a task requires promotes greater effort at controlling production and more vigilant monitoring of output. This increased complexity leads to greater accuracy and complexity of L2 production when compared to performance on simpler task versions that require little or no reasoning (p. 12). According to Robinson (2011), a complex task which may involve learners explaining the reasons behind other people's actions will increase the attention learners pay to their speech and their efforts at producing complex syntax, for example, cognitive state verbs *he thinks that…she believes that*, compared to simple tasks that require no reasoning. In terms of L2 production, "complex task demands lead to greater effort at conceptualization and elicit the morphologically richer and structurally more complex syntactic mode" (Robinson, 2011, p. 14). Complex tasks, for example those that involve reasoning without planning time will generate more elaborate communicative concepts at conceptualization which, in turn, results in more complex and accurate L2 speech, at the cost of fluency. If however, planning time was permitted, positive effects on all

three aspects of accuracy, complexity, and fluency would result.

We can see then that Skehan's (1998) and Robinson's (2003) theories provide contrasting views regarding the effects of strategic planning on oral task performance in terms of accuracy and complexity. Planning studies to date have given weight to both models. Thus, in order to determine which of these two competing theories is more convincing, more research, particularly those investigate the written modality, is needed.

Online Planning vs. Strategic Planning

Ellis (2005) suggests that even the language that seems to be effortless and naturally occurring involves planning and that ''planning is essentially a problem solving activity''; it involves deciding what linguistic devices need to be selected in order to affect the audience in the desired way (Ellis, 2005). In this regard, Crookes (1989) argues that planning is a manipulable condition of task-based performance and process. There are a number of different types of planning and these are discussed and operationalized by Ellis (2005). Ellis (2005) makes a distinction between two major types of planning, namely, *online planning* and *strategic planning*. While *online planning* is related to an examination of the planning which takes place during the task performance; *strategic planning* deals with the planning time prior to task performance (Yuan & Ellis, 2003).

The impacts of online and strategic planning are somewhat different. According to Ellis (1987), online planning tends to increase accuracy but decrease fluency. The effect of strategic planning on accuracy, complexity, and fluency is more complicated and, depending on the measures taken and the design of the study, mixed results have been obtained. For example, Skehan and Foster (1997) argue that learners who benefit from a planning time before task performance achieve greater accuracy in unstructured rather than structured tasks, while they show greater fluency in structured rather than unstructured tasks. Other studies by Foster (1996), Foster and Skehan (1996), Menhert (1998), Sangarun (2001), Skehan and Foster (1997), and Yuan and Ellis (2003) suggest a positive effect on fluency and complexity, but a negative impact on accuracy.

Guided Strategic Planning vs. Unguided Strategic Planning

SLA researchers have investigated the way strategic planning can be manipulated in order to improve different aspects of L2 speech. One way is through guided planning which involves focusing learners' attention as they prepare for a task, for example, attending to specific aspects of grammar or vocabulary (Ellis, 2009). This type of instruction could be referred to as task-supported language teaching as it favors pre-linguistic instruction. Guided planning could also focus on meaning by attending to the storyline or content of a task. Finally, it could involve attention to both language and meaning/content. Unguided planning, on the other hand, allows learners time to plan independently without any teacher-led assistance towards language or content. Thus, learners are free to use their own linguistic resources to prepare for a task.

Concerning the effectiveness of guided vs. unguided planning for promoting fluency, accuracy and complexity the research to date indicates that strategic planning is a worthwhile pedagogic tool for developing learners L2 oral skills as it produces clear gains in fluency and complexity, and on occasion accuracy (for a review of literature, see Ellis, 2005, and Ellis, 2009).The majority of the results lend

weight to Skehan's (1998) Limited Capacity Hypothesis which claims that planning results in gains in fluency and complexity or fluency and accuracy and that a trade-off exists between accuracy and complexity. Thus, although fluency, accuracy and complexity have been defined as distinct aspects of L2 speech, this does not mean they do not interact with each other. Furthermore, we must also take into account Housen, Kuiken and Vedder (2012)'s warning that discrepancies in the findings could also be due to a lack of clarity and consistency with the measures used in previous studies.

Moreover, the majority of the empirical studies have examined unguided pre-task planning (Crookes, 1989; Ellis & Yuan, 2004; Foster, 1996; Foster & Skehan, 1996; Foster & Skehan, 1999; Hulstijn & Hulstijn, 1984; Kawauchi, 2005; Menhert, 1998; Ojima, 2006; Ortega, 1999; Sangarun, 2001, 2005; Skehan & Foster, 1997; Tuan & Neomy, 2007; Wigglesworth, 1997; Yuan & Ellis, 2003).

Regarding the guided type of planning, on the other hand, Mahdavirad (2015) investigated form-focused guided strategic planning and found that if the guidance of strategic planning contains explanations of the structural and lexical patterns necessary for performing a picture-prompted oral narrative task, it has a positive effect on accuracy, complexity, and fluency of learners' task response.

The review of research on guided vs. unguided strategic planning implies that less attention has been paid to the effects of different types of guided strategic planning particularly as far as the writing tasks are concerned. Thus, concentrating on the written modality of language production, and adopting more manageable measures for scoring the lexical complexity of learners' performance, the present study focused on the way form-focused guided pre-planning affects decision-making tasks, i.e., a pedagogic writing task type which is cognitively demanding in that learners are initially loaded cognitively by making rational decisions for the cases they are provided with, and then, in their output, they have to support their decisions by offering some plausible reasons they have discovered from the prompts given (Skehan & Foster, 1997; Foster & Skehan, 1996).

Methods

Research Question

The present study addressed the following research question:

- What is the effect of form-focused guided strategic planning on the lexical complexity of EFL learners' performance in decision-making writing tasks?

It was hypothesized that there is a significant difference between the written performances of the participants in the planned vs. unplanned task conditions in terms of lexical complexity.

Participants

The study was conducted in an Iranian EFL context. The participants in the study were 20 female, upper-intermediate EFL learners studying English in a language institute. The native language of the learners was Persian. The participants' ages ranged between 18-25, and the average equaled 19. The syllabus employed in the language course was a task-based one based on Top Notch book series. The participants of the study participated in the study as part of the course assessment in their respective course.

Procedure

Prior to the experiment, the participants of the study were informed that their writings in the study would be considered as part of their course grades. In the experiment session, every individual participant of the study was required to perform two decision-making tasks. The writing tasks employed were performed in two conditions, namely, unplanned and planned. First, the unplanned task was administered. The participants were given 20 minutes for task performance to write a 150-200 word paragraph. The topic of the first task was 'The Iranian Parents' Preference of Private vs. Public School for Their Children'. Then, the planned task was given. The topic suggested for the second task was 'The Iranian Students' Preference of State vs. Non-state University'. The two topics were somehow parallel in that both were focused on two similar common challenging issues among Iranian families and students. The participants were required to follow a comparison-and-contrast pattern for expressing their views on these two topics. For the performance of planned task, the participants were allotted with a five minute planning time before writing. In the pre-planning time given for the planned task, the participants were told to think about the topic to get ready for writing. They were also provided with detailed instruction about how to use the structural and lexical patterns employed for developing a comparison-and-contrast paragraph, i.e., the pattern which was required to be used in performing the decision-making tasks of the study. No explanation was given regarding the content. The participants were allowed to take down notes on what they were planning during the planning time. The notes were collected before the performance of the planned task. Every individual participant's writing on the two tasks was collected for further analysis with regard to the research question of the study.

Results

Testing Instrument

In order to examine the way the independent variable of the study, i.e., form-focused strategic planning, affected the dependent variable, i.e., the lexical complexity of the task response of the participants in the writing tasks under investigation, the data were scored for further analysis. For scoring the lexical density of the written performance of every individual participant in the two writing tasks of the study, following Robinson (1995), the number of lexical words was divided by the total number of words employed in the text. Then the result was multiplied by 100. Thus, every individual participant's score for the lexical density of task response for each task was obtained. Regarding the research question of the study, the raw scores of the participants were used for further statistical analysis.

Data Analysis

The data analysis results for the lexical density of written discourse produced by the participants in performing the decision-making tasks of the study are displayed in Table 1 that showed form-focused strategic planning had a positive effect on task response characteristics of the participants. In order to test the significance of difference, the results were compared using Matched t-Test. Table 2 presents the results of Matched t-Test for the lexical density of the learners' written production in the

unplanned vs. planned decision-making tasks. From Table 2, it can be observed that the observed t-value is greater than the critical t-value for the lexical complexity of task response in unplanned vs. planned task (t-observed > t-critical, at .05 level of significance). Therefore, the difference between the two performances of the participants was significant.

Table 1
Results of Data Analysis for the Lexical Density of the Unplanned vs. Planned Task

Task Condition	Mean	Standard Deviation
- strategic planning	40.8723	2.9943
+ strategic planning	45.3795	1.9530

Table 2
Matched t-Test Results for the Lexical Density of Unplanned vs Planned Task

Mean (Unplanned Task)	Standard Deviation (Unplanned Task)	Mean (Planned Task)	Standard Deviation (Planned Task)	T-Value Critical	Degree of Freedom	Two-Tailed Probability	t-Value Observed
40.8723	2.9943	45.3795	1.9530	2.093	19	.05	2.720

Discussion and Conclusions

The study addressed the effect of form-focused guided strategic planning on the lexical complexity of learners' performance in decision-making writing tasks. Dependent variable measured was 'lexical complexity' (operated as the ratio of lexical word to the total number of words, multiplied by 100). The independent variable was 'form-focused guided strategic planning'. It was found that there was a significant difference between the lexical complexity of the participants' writings in the planned vs. unplanned task performance conditions.

The results of the present study supports the results of other studies in the literature which investigated other types of planning (e.g., Sangarun, 2005) and suggests that when learners are provided with form-focused strategic planning, they can plan *how* to say their intended meaning. Regarding complexity, the findings highlight the beneficial effect of planning, too. Previous research reporting the gain in complexity as a result of planning includes Crookes (1989); Ellis and Yuan (2004); Foster and Skehan (1999); Gilabert (2005); Kawauchi (2005), Ojima (2006); Ortega (1999); Skehan and Foster (1997); Tavakoli and Skehan (2005); and Wigglesworth (1997).

The findings are also similar to the results of the study by Mahdavirad (2015) that indicated a significant difference between the accuracy, complexity and fluency of the oral narrative task performances of the learners in form-focused guided strategic planning vs. non form-focused guided strategic planning conditions. These results indicate that by providing learners with form-focused guided pre-planning, they are given a chance to focus on both form and content and thus produce more complexity.

The results may have implications for syllabus design and materials preparation, too. As Robinson (2003) argues, the major problem in task-based language teaching is

determining criteria for grading and sequencing tasks; therefore, data based empirical research is required to identify the criteria affecting task difficulty. Thus, the findings of the present study can be used as an empirical basis for selecting, grading, and sequencing writing tasks. Another implication of this study for teaching practice is the facilitative role of pre-planning time period for enhancing complexity in writing tasks. Instead of forcing the learners to produce language by online processing of the output, they can be encouraged to concentrate on the task prompt, activate their memory system, organize the content, plan *how* to express their intended meaning, take notes, gain confidence, and finally perform the task more actively.

As in all classroom studies, the sample size was not large, and therefore, as always, further research is advisable to make stronger generalizations. Moreover, task types other than decision-making used in this study can also be used for data collection. Replication studies employing measures different from the ones used in this study are suggested.

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